

## CLAIMS

1. Computer interface system comprising:
- (a) means for providing a cursor for linkage with objects;
  - (b) means for generating the haptic representation of objects directly from the graphical representation of the objects for linkage with the cursor;
  - (c) means for creating, modifying, and saving haptic materials for creating a heuristic database to be used in the modeling of haptic virtual environments; and
  - (d) means for utilizing the material database for the modeling of haptic virtual environments.
2. The system of claim 1 wherein said data base comprises one or more of static friction, dynamic friction, stiffness, and damping components